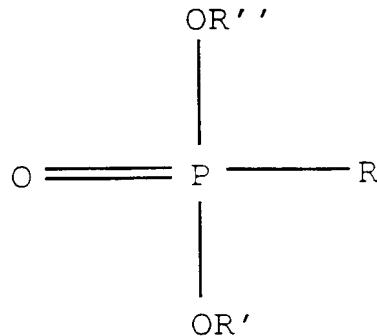


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CLAIMS

1. Additive for a drilling fluid, consisting of a compound in accordance with the formula

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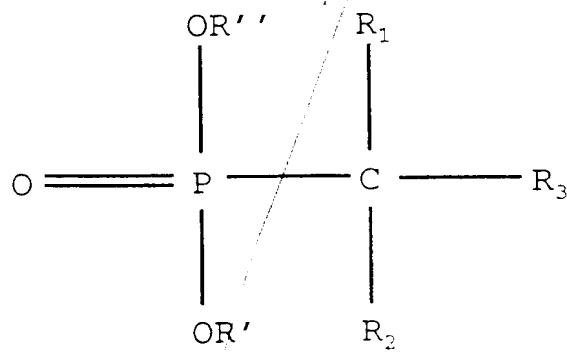
wherein R, R' and R'' are radicals exclusively containing H atoms or combinations of H, C, O or P atoms up to a maximum of 100 atoms.

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2. The additive of claim 1, wherein R, R' and R'' are radicals exclusively containing H atoms or combinations of H, C or O.

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3. The additive of claim 1, consisting of a compound in accordance with the formula



20 wherein R₁, R₂ and R₃ are radicals exclusively containing H atoms or combinations of H, C, O or P atoms up to a maximum of 100 atoms.

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4. The additive of claim 3, wherein R₁, R₂ and R₃ are radicals exclusively containing H atoms or combinations of H, C or O.

5. The additive of claim 1, based on a phosphor derivative of the succinic acid.

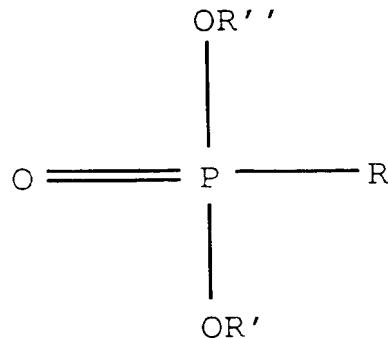
6. The additive of claim 1, based on a short chain phosphorylated hydrocarbon.

10 7. Drilling fluid comprising an additive in accordance with claim 1.

15 8. The drilling fluid of claim 5, comprising an additive in accordance with claim 1 in a concentration of up to about 10% weight by volume.

9. A drilling fluid comprising water as base component; a viscosifying agent to increase the viscosity of the fluid; a filtrate reducing agent; a weighting agent to adjust the density of the fluid; and an additive for a drilling fluid, consisting of a compound in accordance with the formula

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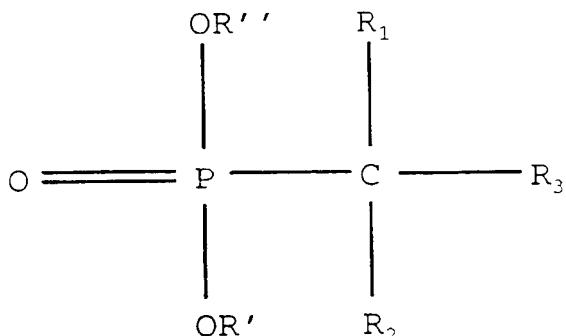
wherein R, R' and R'' are radicals exclusively containing H atoms or combinations of H, C, O or P atoms up to a maximum of 100 atoms.

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10. The drilling fluid of claim 9, wherein R, R' and R'' are radicals exclusively containing H atoms or combinations of H, C or O.

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11. The drilling fluid of claim 9, wherein the additive consists of a compound in accordance with the formula



wherein R₁, R₂ and R₃ are radicals exclusively containing H atoms or combinations of H, C, O or P atoms up to a maximum of 100 atoms.

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12. The drilling fluid of claim 11, wherein R₁, R₂ and R₃ are radicals exclusively containing H atoms or combinations of H, C or O.

20 13. The drilling fluid of claim 9, further comprising a shale swelling inhibition agent.

14. The drilling fluid of claim 13, wherein the shale swelling inhibition agent comprises phosphate- or silicate-based compounds.

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15. ^{Method} of preventing accretion of cuttings in a borehole, said method comprising the step of adding to a drilling fluid

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an additive in accordance with claim 1 prior to or during a drilling operation.

16. The method of claim 15, wherein the additive is added in a 5 concentration of up to about 10% weight by volume of the drilling fluid.

Att 7

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